MACDONALD COLLEGE JOURNAL

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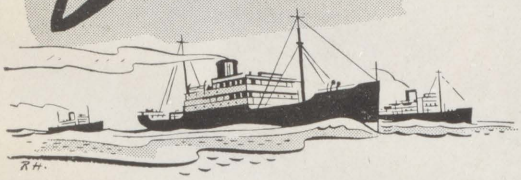

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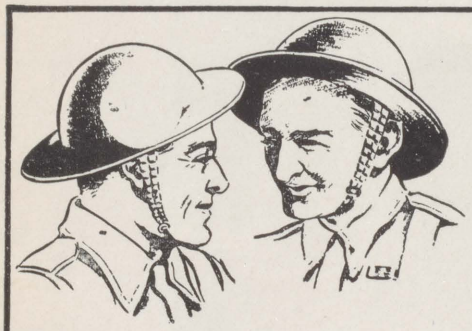

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EDITORIAL COMMENT

For some time past farmers' organizations have been passing resolutions asking the Federal Government to exempt men engaged in farming from military service. They have achieved their objective, for the manpower programme recently announced does just that. The new programme also stabilizes the level of farm labour by making it unlawful for any man engaged in farming to take a position in any other industry unless by special consent of the Government.

These moves will have the effect of "freezing" farm labour at the level existing at the time of announcement of the programme, except for those who may leave the farm to enlist for active service. What the programme does not do is to provide any increased amount of labour for farming. This is a problem in some localities for which a solution is yet to be found.

SAVE THE LAMB CROP

Some encouragement is seen for the producers of lamb and wool by recent press notices. It has been announced that it is the intention of the Canadian Wool Board to stabilize the price so as to encourage production and increase the domestic supply. It has also been announced recently that the ceiling price on lamb has been removed. Such moves have not been unexpected in view of the increasing demand for these products. In fact, many people feel that they are long overdue. It is not many weeks since it was announced that the domestic consumption of new wool in the United States would be reduced to 40 percent of normal requirements. More recently a further reduction in this amount has taken place and it now appears that the domestic allotment will be between 10 and 20 percent of normal. There is little doubt but that we in Canada will curtail in the same way and to the some extent.

Canada is not a large sheep producing country, but sheep do occupy an important place in many parts and on many farms; and there is little doubt but that the present production could be greatly increased with little effect on other lines of farming. It would be a distinct advantage in Eastern Canada in not only affording another source of revenue but also in utilizing pasture and in increasing the fertility and productivity of the land. The Canadian sheep breeder can help in the present circumstances by extending his business and by giving that extra attention which, at this time of year, means large returns in both lambs and wool. In view of the highly favourable market prospects and the relatively small labour requirements, it is to be hoped that many farmers will find it possible to take advantage of this situation.

A PROGRESSIVE STEP

The Quebec Beef Cattle Association is deserving of our commendation in undertaking to establish two centres for artificial breeding in Quebec. While this means of livestock improvement is not new in Canada or in some other countries it has not become generally accepted by farmers as being practical.

In recent years the practice of artificial breeding has grown rapidly in the United States. In fact large numbers of breeding organizations are already established and operating satisfactorily. In Canada we already have a number of breeding centres in Western Canada and during the past year one centre was established in the Maritimes. The results obtained from these organizations so far appear most gratifying.

Because of this experience and the advantages of artifiicial breeding in making possible the greater use of proven sires and the greater control of disease it is hoped that this practice may become more generally accepted.

It's Up To Us

by **Ian B. McCuaig (Agriculture 1942)**

THIS WAR will not be won until we learn that total war effort means a maximum utilization of our resources, whether they be knowledge, skilled craftsmanship, or labor in the most elementary sense of the word. There is a serious condition growing in one of our vital war industries, — i.e., the labor shortage in food production, and we who are most closely concerned with the problem must do all in our power towards its solution.

From coast to coast, when war was declared, farmers' sons, and the young men in farm communities, were among the first to offer their services, either in the active forces or in war industries. At that time there was a surplus of wheat that looked like the widow's cruse of oil; hogs were low on the list of imports Britain wanted; New Zealand butter was still reaching the British Isles; apples were a headache for the grower, for the storage houses were filled to overflowing, and many trees were left unpicked. Men in farm communities could find no answer to the question of how they could best serve, except in the recruiting posters and radio addresses which covered the nation. If they remained at home, it appeared that they would only add to the overwhelming surplus already existing, so the natural step was to enlist. The government apparently had not the desire, or the foresight, to instruct or conscript them to stay on the farm.

Competent help in farm districts is lacking to a serious degree. Whether or not the Women's Army will remedy the situation, is yet to be seen. With the growing demand throughout the British Empire and the Allied nations for increased production of food, we cannot take the chance of leaving extra farm labor to fate. Women will take the place of many men on farms, but there are jobs that will be too much of a strain on inexperienced girls, that should be done by men. If it is the government's policy to have agriculture students complete their course before entering any of the Services, then during their five months' summer vacation, these undergraduate students should supply, to the extent of their ability and numbers, help for the farmers producing vital food supplies.

The benefits would be two-fold. The farmer would get help with his work, and the student would gain valuable experience on a well-managed farm. The government could work through the agricultural colleges across Canada, and students specializing in some definite branch of farming would be given an opportunity to work on that type of farm.

Canada's position in post-war work will undoubtedly be that of one of the food supply-houses of the world. There will be people to feed all over Europe, Asia, and probably the Americas. There will be adequate transportation; there must be enough food. And the food must keep coming for years, — it will not be a temporary arrangement. This means that land that is now fertile must not be rendered barren by ignorant or careless methods of cultivation. Pests and diseases must not be allowed to become rooted in our farming centres, to overpower the attempts of the grower to meet the demands. Only the best seeds must be used in order to get the best yields. Herds must produce high yields of disease-free milk. Poultrymen will not be able to afford flocks which are mediocre. Valuable land near cities must not rest untilled for lack of proper drainage. Men must never again be paid NOT to grow food while other people starve, or else all our struggles and sacrifices in this war are for naught.

Our share in this task is tremendous, but it can be done. The logical solution is to have graduate students in agriculture working throughout Canada under the direction of a nucleus of older, more experienced specialists who have studied the ills of the individual districts. These young men would have the most up-to-date information on the particular problems involved, coupled with the advice of the specialists, and the experience of the best farmers in the district. They would become thoroughly familiar with the idiosyncracies of individual farms, and the farmer would in this way have access to the latest information available in the nation, on any particular item. By the introduction of new men with new ideas, perhaps working under the direction of regional planning boards, the service which the Department of Agriculture could offer the farmers of Canada would be infinitely increased.

The plan is a sensible one in the light of the benefits obtained. It would result in a more efficient use of the land now under cultivation. The farmer would be given every assistance possible to increase his production, and thereby improve his position financially. It would give agriculture students, who by this time will have had their fill of war and all its horrors, something constructive to do, in which they may realize, to an appreciable extent, the liberty and mode of living for which they had been fighting.

CO-OPERATION ASKED FROM PIG BREEDERS

A project designed to help farmers to prevent losses and unthriftiness in young pigs is being actively followed this year by scientists in various branches of animal industry. Farmers within a radius of 50 miles of Macdonald College, who have had or are having poor luck with their young pigs are urged to write to:

The Pig Health Project,

Box 254,

Macdonald College.

MARITIME NOTES

NOVA SCOTIA FARMERS WARNED AGAINST USING CHEAP FEED AS SEED

The temptation will be strong among farmers of Nova Scotia this year to use the cheap feed imported under the free freight policy, as seed for planting the new crops of wheat, oats and barley. This fear was thoroughly discussed at a meeting of the joint advisory committee on agricultural services for Nova Scotia held at Halifax recently under chairmanship of Hon. John A. McDonald, Minister of Agriculture.

There is a double danger in using such imported feed for seed, first, because of possible lack of germination qualities, and second, because of danger of greater weed contamination. But many farmers undoubtedly plan to use this feed, obtained at lower prices than for years because of the free freight policy. This policy does not extend to seed grains. The Department of Agriculture has been advised that the Dominion Government looks upon seed grain supplies as a provincial matter, and therefore does not favour extending the freight assistance policy to include importations of seed.

In view of this, some form of assistance to Nova Scotia farmers to enable them to obtain proper seed is being discussed. A certain supply of good seed is available from farmers in the province, particularly since the introduction of Erban oats. Much of the seed supply, however, must be brought in from other provinces, chiefly Ontario and the West. It is felt to be vitally important not only to assist farmers to get good seed supplies, but also to encourage those farmers in the province now growing good seed to keep on doing so.

MONCTON SHOW A SUCCESS

On March 11th the first Maritime Fat Cattle Show and Sale was held in Moncton, and was an unqualified success. It was sponsored by the Maritime Stock Breeders' Association and over 500 visitors came to look over the beef cattle and watch the bidding. The Minister of Agriculture for New Brunswick, Hon. A. C. Taylor, opened the Show and complimented the exhibitors on their fine showing of high quality animals.

A 1060 pound Shorthorn steer owned by George A. Chase of Port Williams, N.S., was Grand Champion of the show and sold later at the auction for 40 cents a pound. The Reserve Champion, another Shorthorn which tipped the scales at 745 pounds, brought 63 cents. The average price for the 28 head which were offered was 19.6 cents per pound, or $187.51 per head.

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Mortished (I.L.O.)

AGRICULTURE

Articles on problems of the farm

Making Up For Meadow Failures

by J. N. Bird

POOR stands resulting from dry weather in June gave many of the newly-seeded meadows a rather hopeless appearance following harvest last year. Some of these, no doubt, will have been plowed up last fall and those that remain will deserve a careful inspection before the spring rush begins.

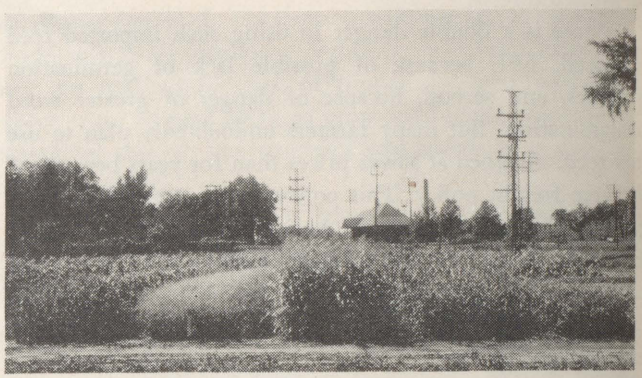
It is surely unfortunate if our dairy farmers are to be hampered by a shortage of feed at a time when the demands are so urgent for an all-out dairy production effort. Certainly, if anything can yet be done to improve the situation, no time should be lost in making a start.

No attempt should be made to improve meadows by the broadcasting of clover seed at this late date. If the stand of clover is too poor to give a satisfactory yield, it will be necessary to plow the land as soon as possible and seed it to some other crop. But what crop from spring seeding can be expected to provide ample pasture for summer and an adequate supply of hay for next winter's feeding? That is surely more than we can expect of any one crop, but the one that is most likely to prove suitable for the purpose is oats.

Oats make palatable and nutritious feed whether cut as hay, pastured, or fed green. It also serves as a very satisfactory nurse crop if the field is to be "seeded down" again, and the "catch" of seeds will have a better chance with the oat crop used as hay or pasture than if it were allowed to ripen.

Crops For Hay

When oats are grown for hay or pasture, a strong-strawed, late variety, such as *Banner,* is usually preferable. If seeded alone, the seeding rate should be about 3 bushels per acre.The hay, if well-saved, has a higher feeding value than timothy, especially for dairy cattle. Hay of still higher feeding value may be obtained from a mixture of oats and peas. Mixtures with the proportion of peas as high as one-half by weight of the mixture have been recommended, but if the peas grow too rank, they are apt to cause lodging of the crop and this will make the handling and curing of the hay rather difficult. Lodging is less apt to occur if the proportion of peas is kept down to about one-third by weight of the mixture. The success with which peas have already been grown should serve as an indication of what might be expected of the mixture in any particular locality. The rate of seeding should be about 100 to 110 pounds per acre.



Different types of millet. From left to right — Empire, Crown, Sudan grass, Japanese, Hungarian.

If the field is to be seeded down again with timothy and clover, it will be better to use oats alone rather than the oats-and-peas mixture. An application of commercial fertilizer such as the 2-12-6 or a light dressing of manure may be of considerable help both to the oat crop and the new seeding. As a general rule, spring-plowed land cannot be expected to be as favorable to "catches" of small seeds as land plowed in the fall. This is due to the firmer soil and better moisture conditions which result from the latter treatment. Early plowing, extra care in seed bed preparation and early seeding may greatly increase the chances of getting a satisfactory stand from a new seeding on spring-plowed land.

Best results from the standpoint of both yield and quality of hay should be expected from a cutting made soon after the oats are fully headed. The final value of the crop, however, will depend on the success in curing it.

If it is not possible to get the field in shape for seeding before the first of June, it may be better to use millet in preference to oats for hay. There are different kinds of millet, but they are all warm weather crops and thrive best if fitted into the warmest part of the growing season. This means that they should be seeded in early June in order that they will have made their greatest growth before the first early frost. Millet varieties of the foxtail type, such as *Hungarian,* make a fairly satisfactory hay, with a feeding value somewhat similar to that of timothy for dairy cattle. Caution is necessary in feeding it to horses since it has been known to produce harmful effects when fed in a rather

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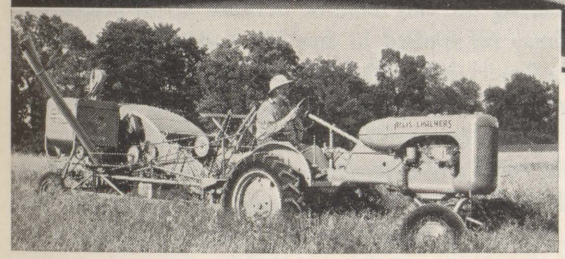

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Producing Table Stock Swedes

by L. C. Raymond

DURING the past week the "Farm Broadcast" at the noon hour has each day given the market quotations for what are commonly called "table stock" turnips. With minor variations it goes like this:— "Quebec unwaxed, 60c-75c; New Brunswick waxed, $1.15-$1.25 per bushel." Why this tremendous difference in value? Is it wholly a question of waxing, or is there some peculiar virtue in the New Brunswick crop? Both the value of the product and also the great difference in the offered price make this subject one that is worth looking into a little further.

Table stock turnips refer to the bulbous roots, produced for human consumption, from that crop which is variously known as swedes, swede-turnips, or just plain turnips. The name turnip really applies to a close relative of the swede, which has a much softer, more watery root, usually with a white flesh.

The chief centres of production at present are in Ontario, north and west of Toronto where the industry is quite widespread and well established; in Prince Edward Island where the district about Charlottetown is the most important one; in New Brunswick, particularly along the St. John river, and a relatively new centre in Quebec in L'Islet and Kamouraska counties in the lower St. Lawrence. The great bulk of the table stock either for home consumption or for export comes from these districts.

The location of these areas is not without significance for the swede crop is one which demands a fairly cool climate and a good moisture supply if it is to develop normally. Excellent natural conditions are found in the Maritimes, but they can be very successfully grown farther inland, particularly in sections where the elevation is fairly high and the soils not so heavy that they tend to bake and crack in the warmer weather.

Where this crop be grown it offers almost the ideal cash crop since the grower is not dependent solely on the market to dispose profitably of his crop. Should the market prove unfavourable the swedes may still be used as a live stock feed.

Choice of Variety

For table stock production, few if any varieties have been found more suitable than Laurentian. The type and character of this variety were discussed in a recent issue of the *Journal*. Its popularity seems to rest mainly on its bright purple skin colour, the smoothness and uniformity of the root, the absence of many heavy feeding roots and the high proportion of marketable roots it is possible to get per acre. The past few years have seen a tremendous swing to this variety in table stock districts.

In purchasing seed of Laurentian it is most important that only the registered product should be obtained. The swede is a cross fertilized plant and unless the seed is grown under the most careful supervision, it is very liable to become mixed and throw undesirable types. Registered seed is always sold in one pound packages which are closed with a paper seal by the officers of the Plant Products Division. Cheaper seed of classes other than registered, is very likely to eventually appear on the market. Registration provides a chain of inspection which guarantees a genuine article.

Place and Method of Planting

Root crops in general require high fertility and clean land if a profitable crop is to be grown. Swedes, and particularly table stock swedes, are no exception. Best conditions are found following a clover sod — a special three-year sub-rotation works in very well. The clover crop when broken down supplies much of the nitrogen required to grow the swede crop. A very good practice is to break such a sod in midsummer of the previous year and keep it worked during the fall months. Manure up to fifteen tons per acre may be applied in late fall and ploughed in just before the land freezes. The following spring before planting commercial fertilizers may be applied and worked well into the surface layers. The quantity and quality of fertilizer should be locally determined — a direct experiment on the field is the best idea. Following a clover sod and manure, it may be possible to use such a mixture as an 0-16-6 but in other cases a 2-16-6 or something even stronger may be necessary. The rate may also vary from 200 to 500 lbs. per acre. It is very poor economy to pinch the supply of fertility.

The time of planting will depend in part at least on the probable marketing date and the size of root required. Prices are usually highest in August and most markets require a relatively small root (3 to 4 lbs.). Many growers plant at intervals, thus spreading the work on the crop and meeting varying market requirements.

Out of test rows like these came the famous "Laurentian" turnip.

Thorough working of the soil should precede planting. A smooth well-tilled and weed-free soil will greatly facilitate planting, germination, thinning and care of the crop.

Planting on the level rather than in drills is to be preferred both from the standpoint of moisture supply and the work involved. Rows for convenient cultivation should be from 28″ to 30″ apart.

Thinning should be done promptly when the seedlings have developed the first true leaf. With level planting and a clean surface soil, this operation can be greatly facilitated by the use of a slanting toothed spike harrow, or a weeder run crosswise of the rows just before the hoe is applied. This is not only reduces the number of plants to be dealt with but is at the same time an effective weeding. Subsequently the actual spacing should be done with a hoe. Owing to the relatively small top on the Laurentian variety and particularly where only a small root is required, it is not advisable to allow too liberal a spacing. Instead of the normal 10″ to 12″, eight inches should suffice, which will in turn provide a bigger yield from a given area.

With the thorough previous working suggested, the weed problem should be well under control. Following thinning, however, it will of course be necessary to row cultivate the crop. This should be done at intervals of a week to ten days and will usually involve three or four cultivations. If the thinning has been done with a hoe and the soil about the plants well worked, there should be little need for any hand hoeing. Any tall weeds which persist should, however, be removed.

Harvesting and Storage

Swedes for table stock should be pulled and trimmed by hand. The use of any of the rougher mechanical methods applicable to stock feeding roots is liable to bruise and disfigure the swede unduly and should be avoided. For the fall market the roots are taken direct from the field but where intended for the winter supply, they must be stored. A great variety of storage methods is employed. A pit a foot or more in the ground on a dry location is sometimes used covering the roots with the soil removed, along with straw and manure. If the business is to be a regular one, however, it is better to construct a permanent storage cellar where more uniform conditions can be maintained and where the roots can be conveniently obtained in the quantities required for the market. Storage should provide good ventilation and a temperature as low as possible without freezing. Five hundred bushels of marketable swedes represents a very good average yield under favourable conditions, but amounts as high as 1000 bushels have been recorded.

Brown Heart

During recent years a great deal of trouble has been caused by that deficiency disease known as brown heart. Affected roots in cross section exhibit water-soaked brownish patches of greater or less extent. It has now been

(Continued on page 9)

Cereal Grains With and Without the Germ

by E. W. Crampton

EXPERIMENTS designed to study the nutritive value of the germ fractions of three cereal grains have been in progress during the past year at Macdonald College from which some interesting and perhaps significant information is already available. Most of the work thus far has been done using pigs as the test animal. This does not detract from its general significance. Indeed in many respects, nutritionally, the human and the pig are close kin.

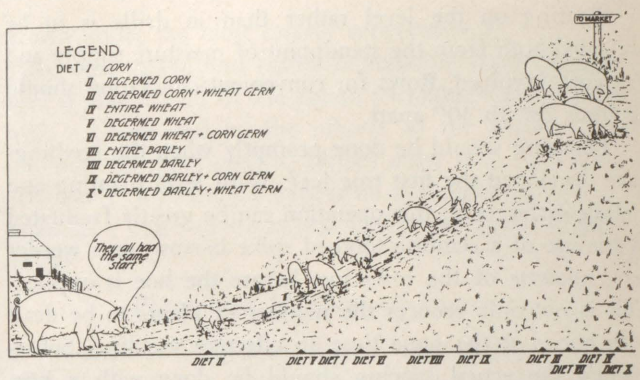
For several years we at Macdonald College had been studying the differences in the cereal grains as feeds for bacon pigs. Different grades of barley were at first under feeding test. The Wheat Pools of Western Canada were anxious to have such data. It was they who suggested that it might also be well to include, in one test, Durum Wheat on the grounds that in some districts this crop might be more acceptable to the growers than barley even though they could not compete in the hard wheat market. In addition frozen wheat was included in the trial.

It was quickly evident that the wheat rations were of especially high feeding value as measured by the gains of the pigs. High grade barley rations were a close second, but corn-fed pigs were definitely in third place. (In each case the cereal grain made up 85-90% of the diets. The balance consisted of a mixed protein-mineral supplement. Vitamin A and D were provided in cod liver oil). However, when the carcasses were examined it was found that those produced on Durum Wheat were penalized for excessive fat. But the frozen wheat did not have this damaging effect, nor did the barley.

From this lead came the suggestion that something in the undamaged germ from wheat was responsible for the rapid fattening. It was of course known that wheat germ is a relatively rich source of the vitamin B complex. Furthermore evidence was accumulating in other laboratories that certain members of this complex were intimately concerned with the building up of body fat in the rat; — why not also in the pig and perhaps also in other species?

But barley did not cause over-fat carcasses. Did this mean that barley germ was different from wheat germ? Might one reasonably say that the cereal grains differed in nutritive value largely because of differences in the make-up of their respective germs? It was to test this idea that the trial described below was planned.

The details of the plan of the test will not be included here. Enough to say that arrangements were made to feed groups of pigs from weaning time to a market weight of 200 pounds on the following ten rations:— corn; degermed corn; degermed corn plus wheat germ; wheat; degermed wheat; degermed wheat plus corn germ; barley; degermed barley; degermed barley plus corn germ; and degermed barley plus wheat germ. In each case, the cereal or cereal-germ combination was adequately fortified with a protein-mineral supplement and with cod liver oil for vitamins A and D.



EFFECT OF THE GERM ON THE NUTRITIVE VALUE OF CEREAL GRAINS AS INDICATED BY THE RELATIVE GROWTH OF MARKET PIGS

From the start of the feeding, marked differences were apparent between the groups. The pigs on the degermed cereals did not relish their rations, gained in weight but slowly, and in the case of the degermed corn ration signs of pig pallagra soon developed. Degermed barley however proved considerably better than the germ-free corn or germ-free wheat rations. The addition of corn germ, either to degermed corn, to degermed wheat, or to degermed barley improved the growth-promoting properties of the diet somewhat, and to about the same extent in each case. These diets were also considerably more acceptable to the pigs, but by comparison with the best were by no means to be considered satisfactory.

In sharp contrast to all other rations were those involving wheat germ and the one using entire barley. These four groups reached market weight closely together and in exceptionally good time. Of special note was the fact that degermed corn, the poorest of all ten rations, became one of the four best when wheat germ was added to it. As would be expected, these results were in no small measure traceable to larger food intake. Since pigs were fed to the limit of their appetites this indicated greater palatability of these four rations. Palatability, however, is much more than taste; indeed may not even involve taste at all but rather be a reflection of the nutritional completeness of a diet. Thus it is easy to believe that the special role of the wheat germ in these rations was related to the vitamin B complex thus introduced.

Further support for the vitamin B theory was obtained when the carcasses were examined. It was found again that the hogs fed wheat germ tended to be over-fat. This fault was not present in the barley (i.e. barley plus barley germ) fed group—a matter still under investigation. In past tests also barley has not resulted in over-fat car-

casses—though the rations have been relished and gains have been well above average.

Interesting and important as these results are to the pig feeder whose money returns are closely dependent upon ration efficiency, the matter has wider significance in view of the fact that the cereal grains used in the human diet are apt to be degermed. The miller frequently removes the germ from corn, wheat, barley and oats as completely as possible when preparing them for human use because the degermed materials keep fresh better. It is perhaps therefore not surprising that wheat germ has been found by many to be a useful addition to the diet especially in view of the fact that surveys of the Canadian diet have indicated that its most common deficiency is Vitamin B_1 (Thiamin).

The general project on the nutritive properties of the germ fractions of cereal grains is still in progress and final conclusions obviously cannot be drawn as yet. Enough has been learned, however, to suggest that the germ plays an important role in the feeding value of the grains not only for pigs but for some other species as well.

PRODUCING SWEDES *(Continued from page 7)*

quite clearly demonstrated that the cause for this disease is an insufficient supply of the element *boron* which is found in the well-known commercial powder, "borax". The amount required seems to vary with soil acidity. On very acid soils 10 to 15 lbs. per acre is enough, but where soils are neutral or nearly so from 25 to 50 lbs. are required. Great care must be exercised in its application since in any large amounts boron is toxic to plant life. It may be thoroughly mixed with the fertilizer and applied broadcast, preferably a few days before planting.

Brown heart is a matter for little concern in swedes for stock feeding, but of the greatest importance in table stock. When cooked, the affected parts are harsh and unpleasant. Badly brownhearted roots may be quite unsaleable.

Marketing

In the larger consuming centres the demand from the marketing angle is for car load lots. The wholesaler functions to distribute this large unit among the various retailers. To meet this situation, cooperative marketing of the farm crop is almost a necessity. It can best be met by the organization of a group of growers in a district which can collectively provide a central processing plant. The normal shipping season runs from September to the following March or April and the product must be fed onto the market in accordance with the demand.

There are, however, many private growers who have established an outlet in some of the smaller towns or cities. Such a grower does not require much in the way of a plant and can nearly always obtain a better price than by going through wholesale channels.

The export business is quite another matter. Competition is keen and nothing but the best product is likely to be given a place. Some of the export business is done on

(Concluded on Inside Back Cover)

CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

CO-OPERATION FOR FIRE INSURANCE

by George Skilling

That one of the most promising fields for Co-operative enterprise in Quebec is fire insurance is illustrated by the story of the Danville Parish Mutual Fire Insurance Company. In 12 years it has grown from a small beginning of 45 farmer members with $138,000 insurance to 235 members and almost $650,000 insurance in force.

The first licence was obtained in November 1929 and gave the company the right to issue Fire Insurance policies on property in the County of Richmond. Business was done on co-operative principles and the object was to provide protection at cost.

The company is controlled by a board of directors, 9 in all, who are elected annually by the policyholders. These engage a secretary-treasurer and appoint committees for various purposes as valuating and adjusting, etc.

A low annual assessment, plus a special assessment in case of a bad fire provides the necessary revenue. A promissory note of 5% of the amount of the insurance is required to cover any extra assessments in case the policyholder fails to make immediate settlement. The annual fee was originally $1 per $1,000. but a few years ago it was increased to $2. Since then there have been no extra assessments although a recent bad fire has reduced the reserves to such an extent that another fire this year would require one.

The cost of insurance on this basis is irregular and has varied from $1.00 (minimum) to $11.00 per thousand per year. On the average it is only slightly more than half that of companies in the "Canadian Fire Underwriters". A maximum of $5,000 is allowed on farm buildings. This has the effect of keeping down heavy losses.

The company has had careful management and has enjoyed a consistent growth.

MARKET COMMENTS

Rationing spreads as the list of goods becoming scarce lengthens. The list is not very long as yet. At present scarce goods are mostly non-food products or food products from a distance. The list includes rubber, oils, jute, tin and sugar. These are goods farmers buy rather than what they sell. The list lengthens continually. Scarcity in one line is likely to lead indirectly to scarcity in another line.

Reasons for rationing are the loss of sources of supply and scarcity of transportation. A somewhat similar development took place in 1917, the third year of the earlier war. This is the third year of the present conflict. Parts of the world are on short rations while other parts have difficulty in disposing of surpluses. This general condition may be expected to prevail for the duration. Just how it may affect different farm products it is impossible to say as this depends on the way the war develops. This also explains the need for and change in regulations from time to time.

Apples

The McIntosh apples offered on Montreal market during the past month were from New York State. The duty was lowered during the month.

Eggs

Eggs for Britain are now required in processed form to save shipping. Several plants are now in operation and some others will soon be in operation.

Bacon

A recent announcement is of a price for B3 grade of Wiltshire sides equal to B1 sizable. This is to allow a similar price for sides in the 65 to 70 pound class equal to that of the 60 to 65 pound class. This weight of side is produced from hogs weighing not less than 200 pounds alive. This feeding to heavier weights is designed to increase output of bacon. An increase of 5 pounds per hog is reported in market weight since November 1941.

Trend of Prices

	March 1941	*February* 1942	*March* 1942
	$	$	$
LIVE STOCK:			
Steers, good, per cwt.	9.37	9.90	10.40
Cows, good, per cwt.	6.40	7.25	7.85
Cows, common, per cwt.	4.55	5.43	6.00
Canners and Cutters, per cwt.	3.77	4.68	5.15
Veal, good and choice, per cwt.	12.00	13.65	12.65
Veal, common, per cwt.	9.88	12.08	10.40
Lambs, good, per cwt.	—	11.00	—
Lambs, common, per cwt.	8.58	10.50	10.40
Bacon hogs, dressed, B1 per cwt.	11.63	15.35	15.35–15.50
ANIMAL PRODUCTS:			
Butter, per lb.	0.35½	0.35	0.35½
Cheese, per lb.	0.18	0.25	0.25
Eggs, Grade A, Large, per doz.	0.21½	0.33½	0.31½
Chickens, live, 5 lb. plus per lb.	0.20½	0.22	0.24½
Chickens, dressed, milk fed Grade A, per lb.	0.26½	0.27½	0.27½
FRUIT AND VEGETABLES:			
Apples, B. C. McIntosh, per box	1.95	2.75–3.25	3.25–3.50
Potatoes, Quebec No. 1, per 75 lb. bag	0.55	1.60–1.65	1.60
FEED:			
Bran, per ton	27.00	29.00	29.00
Oil meal, per ton	(32%) 33.00	(38%) 44.00	(38%) 44.00

HULL CO-OPERATIVE SOCIETY

M. B. Bonnier, and Georges Michaud — of the agronome service are standing outside the office of the "Hull Co-operative Society" in which both men have taken an active part. This society, organized in January 1941, has had splendid success as a consumer's co-op. The annual meeting last month reported a $48,000 business in the year.

A fine steel-roofed warehouse — 96 x 48 feet, has been built on land leased from the C.P.R. Conditions favour further expansion. A seed mill and grist mill are being considered. The membership is 50-50 English and French.

Mr. Bonnier has been acting as manager during the first year.

MANIWAKI CO-OP IN HEALTHY STATE

The annual meeting of the Maniwaki Farmers co-operative stirred high enthusiasm with its reports of a successful period of operation with a turnover of $163,000 in the last 15 months and a substantial net profit which will be shared by 114 shareholders.

Beginning in 1930 as a purchasing co-op the organization expanded in 1938 when it bought a local creamery. It now does both a buying and selling business. Its mainstay has been a good butter market and the high quality which it has maintained. 303,000 lbs. of butter have been sold in the last year. The co-op has assets of $20,103.99 and is free of debt. There are now 123 members.

BRITISH CO-OPS STAND UP WELL

The British Co-operative Movement with 8,750,000 members and a retail trade of a billion and a half dollars turned back $80 million as rebates to its membership in 1941. Co-operative funds have made a huge contribution to national savings. The retail co-operatives have the major part of their $560 million of cash investments in government securities.

mature condition as their only roughage. If seeded in the early part of June, *Hungarian* millet will be ready for cutting, when well-headed, toward the latter part of August. It will give the best returns on rich, well drained soil and requires more careful seed bed preparation than is usually given to oats. The seed is small and should be seeded through the grass-seed attachment of the grain drill or broadcasted by means of a hand seeder at a rate of about 20 to 25 pounds per acre. A follow-up stroke with the harrow will be necessary to ensure that the seed is properly covered.

Crops For Pasture

Oats also make a fairly satisfactory pasture crop. If seeded during the month of May, a good crop should furnish quite a fair amount of grazing toward the end of June and through the early part of July. It is possible to extend grazing beyond this period by the use of a mixture of oats and Sudan grass.

Sudan grass is a plant of the millet type which grows rapidly during the warm weather. It is quite palatable and nutritious and seems to have "what it takes to produce milk". As it is a large-seeded grass, the seed may be mixed with the oats and seeded through the grain box of the drill, but care should be taken that the seed is not buried too deeply in the soil. When oats are seeded alone the rate of seeding should be about 3 bushels per acre but if seeded with Sudan grass this rate might be reduced to 2 bushels and the sudan grass seeded at the rate of 15 pounds per acre.

If late summer pasture can be supplied from some other source, there may be some argument in favour of seeding down with the oat crop which is used as pasture. If the stock can be kept out of the field during wet weather there will be little danger of injury to the grass and clover seeding through tramping, and the pasture will develop a bottom growth which will provide some fall pasture and will also furnish either hay or pasture during the following year.

Where sweet clover grows well, it will provide good fall pasture when seeded with oats as a pasture crop. The oats provide the pasture in the early part of the season and the sweet clover in the latter part. A mixture of 2 to 2½ bu. of oats and 20 pounds of scarified sweet clover seed per acre has been recommended for these conditions.

When pasturing any of these rapidly-growing annual crops, there is apt to be considerable wastage if the stock are not turned into the field sufficiently early or in numbers large enough to graze down the pasture when it is in the best feeding condition. Experience has shown the necessity of turning in the stock when the oats are about 6 inches tall and grazing heavily enough to keep the oats from coming into head. In order to make better use of the pasture it may be possible to have it divided into two parts which may be grazed and rested alternately. Such a practice is made more feasible nowadays through the use of an electric fence.

Crops For Green Feed

A large amount of green feed can be obtained from crops like corn, Japanese millet, or even the oats-and-peas mixture mentioned above. Although requiring much extra labour as compared with pasturing, there is very little, if any, wastage when these crops are cut daily and fed to stock in a nearby feed lot. Such green feed may come in very useful in supplementing pasture, especially during August and early September.

Where corn grows well, it is likely to prove the best crop for this purpose, especially when varieties which are not too coarse in the stalk are used. Where corn does not thrive so well, Japanese millet may be worth a trial. It is a much coarser type of millet than those of the foxtail type commonly grown for hay, but it may be seeded broadcast in the same way. The rate of seeding should be about 20 to 25 pounds per acre. Like corn it is a warm weather crop and is damaged by the first early fall frost. It is, therefore, important that the seeding should be made in early June if this crop is to make its greatest growth before frost.

Where neither corn nor Japanese millet grow well due to cool summer conditions, a late-seeded mixture of oats and peas will prove the most satisfactory green feed.

PREVENT MARKETING LOSSES

A total annual loss approximating several millions of dollars is charged to the farmer each year as a result of his careless handling of market livestock. The National Livestock Loss Prevention Board recommends the following practices to do away with this waste:

1. Dehorn cattle when young.
2. Remove projecting nails or splinters in feed racks.
3. Keep old machinery out of feed lots.
4. Do not feed heavily just prior to loading.
5. Use good loading chutes.
6. Use sand or fine gravel for bedding to prevent slipping.
7. Cover sand with straw, but no straw for hogs in hot weather.
8. Wet the sand bedding before loading hogs in summer.
9. Provide covers for trucks to protect livestock from sun in summer and cold in winter.
10. Always partition mixed loads to separate classes, and calves from cattle.
11. Remove protruding nails, bolts, or any sharp objects in truck or car.
12. Load carefully to avoid crowding against sharp corners and don't overload.
13. Use canvas slappers instead of clubs or canes.
14. Tie all bulls in truck or car.
15. Slow down on sharp curves and avoid sudden stops.
16. Back truck slowly and squarely against unloading dock.
17. Never lift sheep by the wool.

DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec Department of Agriculture

THE FERTILIZER AID POLICY

Certain amendments and changes have been made in the programme of assistance offered by the Federal Government for the purchase of chemical fertilizers. Final details of the plan are given herewith.

The plan has been put into effect to encourage and assist in the production of those crops that will help Canada send more food to Britain this year, particularly meats, dairy products and poultry products. The subsidies will therefore apply only to fertilizers used on the following crops that will provide food for livestock or poultry:

Pastures
Clover, alfalfa and grass hay crops
Field corn for ensilage or husking
Spring wheat, oats, barley and spring mixed grain for grain production
Mangels and turnips for feeding livestock.

The subsidies will be allowed on the fertilizers listed below, all of which are recommended by the Quebec Fertilizer Board. Subventions are allowed on other fertilizer chemicals and on mixture 0-16-10, but under present market conditions the above are the most readily obtainable. The subventions will not be paid on less than 500 pounds of any one kind or analysis, or on a total of more than 5 tons for any one farmer.

The recommendations of the Quebec Fertilizer Board give details of the kind and amount of fertilizer to use on different crops and on different soils, and should be followed carefully. A copy of the regulations may be obtained from the Department of Agriculture, Quebec.

Subventions are not paid directly by the Department of Agriculture, but come in the form of reductions in the purchase price of the fertilizer. The fertilizer dealer has a supply of forms of request for subsidy, and the farmer must ask for and fill out a form when he buys his fertilizer. **It is a criminal offence to use the fertilizer on which the subvention has been paid on any crops except those named.**

SHAWVILLE SHORT COURSE

With 75 boys enrolled and capacity crowds at the open sessions the Annual Short Course of the County of Pontiac Agricultural Society, March 16-20, was a great success.

In addition to the usual judging contests, outstanding events of the week were the Public Speaking Contest on Thursday night and the address by the Minister of Agriculture J. G. Gardiner on Friday. Audiences of 600 people were present at both these sessions.

Ben Killoran. Winner at Shawville Short Course. Ben is also a salesman for the Journal.

The Agronomist's Silver Trophy, for the highest aggregate score in the course, was won by Ben Killoran of Onslow Corners. The Shawville Creamery Cup for live stock judging went to Dalton Richardson. The Shawville Milling Company Cup — for the highest score in seed judging and weed identification was awarded to Querson Harris, a 1941 diploma course graduate at Macdonald College.

The public speaking contest drew spirited competition, and gained great applause. Ben Killoran's "Salute to the United Nations" was adjudged the winner in the senior class while Allan Young won the Junior contest. Mr. Gardiner greeted the boys who took part at his meeting on Friday. Judges were C. B. Dalton, Rev. A. Fowkes and W. Blackburn.

A feature of the week, also, were the illustrated lectures on Farm Mechanics by Prof. L. G. Heimpel of Macdonald College. These were much appreciated. One-day sessions were held at Ladysmith, Starks Corners and Bristol. In this way a large number of rural young people were given an opportunity to take part.

Great credit is due to the officers of the C.P.A.S. and to Neil Drummond, the agronomist, for the efficient promotion of a very full programme.

Fertilizers eligible for subventions in Quebec

Fertilizer Chemicals		*Subvention par ton*
Sulfate of ammonia	20% N	$8.00
Nitrate of soda	15% N	6.00
" "	16% N	6.40
Superphosphate	20% P_2O_5 Av.	4.00
Muriate of potash	50% K_2O W.S.	10.00
" "	60% " "	12.00

Mixed fertilizers (of single or double strength)

0 — 16 — 6	4.40
2 — 12 — 6	4.40
2 — 12 — 10	5.20
4 — 8 — 10	5.20
4 — 12 — 6	5.20

THE PROVIN

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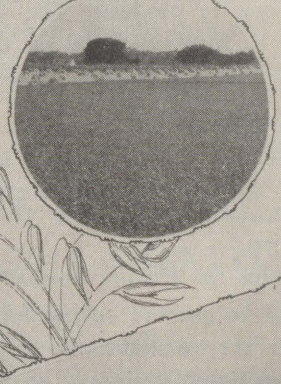
The Provincial Seed Farm is the only one of t
pure stocks of seed of the more important vari
idual farmers who raise seed for sale on the ge
growing centres in the Province, which are co-op

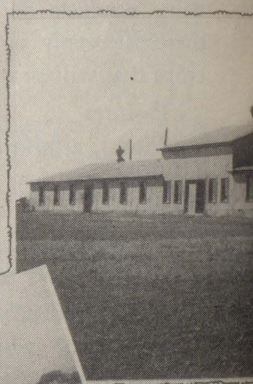
The Seed Farm is a co-operative enterprise be
Department supplies the money for operating expens
The first Seed Farm was opened at Ste Rosalie
that were made on it. The present Seed Farm of
erations in 1932.

One function of the Seed Farm, apart from
is the multiplying of seed of new varieties creat
addition to the list of crop varieties has been lo
gate it beyond the laboratory or the test plot. Th
varieties is easily and rapidly done on the Provi

Corn must be dried to keep it from heating in storage, or from being damaged by freezing. The husked ears are piled in bins in a specially designed drier through which hot air is forced by powerful fans. Complete drying requires three or four days, after which the corn is shelled, passed through the fanning mill and bagged.

Three varieties of oats, three of barley, one of clover, one of timothy and one of alfalfa were propagated in 1941, besides some hybrid corn and sugar-beet seed. Careful lay-out of the fields is planned to reduce the chance of impurities, either from the previous year's crop, or through accidental mixing at harvest.





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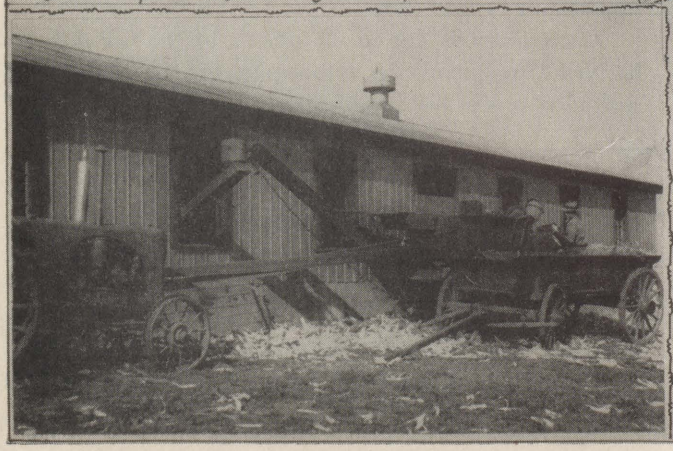
Algonquin corn, a first generation hybrid, produced only by crossing Wisconsin No. 7 (male) and Quebec No. 28 (female), is produced on the Seed Farm. Tassels of the female parent are removed so that no pollen is shed from these plants (indicated in the picture by the areas between the light-coloured double rows).



Ears of corn are harvested by hand and hauled to the husker, a machine which has done away with the old-time "husking-bee". An endless belt conveyor carries the husked ears to a drier in the building. Next year a machine which will harvest the ears and husk them at the same time will be in use.

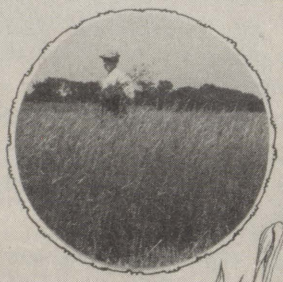
A field of

SEED FARM

ZATION

North American Continent. On it are produced crops. From the farm some seed is sold to individ- ut the bulk of the crop is sold to the various seed zations for the commercial production of seed. artment of Agriculture and Macdonald College. The furnishes the land and supervises its operation. was soon found to be far too small for the demands miles from Macdonald College, commenced op-

ining pure stocks of well-established varieties, nt breeders of the country. Many a promising glect, or through lack of opportunity to propa- pen here, for the multiplication of valuable new rm.



Clover seed is harvested from the second growth. The first cutting is made early in June, to ensure good maturity of the seed crop. The seed crop is cut with an ordinary mower and dried in the field in small cocks until it is ready for threshing. Here Dollard clover is being bagged from the thresher. Yields vary from 150 to 400 pounds of seed per acre depending on the season and the fields used.

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Threshing is done in the field where the variety is grown to prevent mixing varieties. All machinery used in handling the seed crop is thoroughly cleaned; the thresher, seeders, fanning mill and wagons are cleaned out with compressed air after use with each variety. Even the farm horses are fed special meal mixtures to prevent undigested grain reaching the fields.

Good crops demand good cultural practices, and on the Seed Farm particular attention is given to working the land. A heavy disc is being used for after-harvest cultivation which destroys weeds and, when used on sod, makes possible a better seed bed the following spring.

r 44 M.C.

To further reduce the chances of mixing, thresher-run grain and cleaned seed is stored in bags, not in bins where a shovelful of grain might accidentally be thrown into the wrong bin. About half the bags used each year are new ones; any used bags are thoroughly cleaned, then steamed to kill any remaining seed, before being used again.

MARKET MORE POUNDS OF BEEF

Mr. R. S. Hamer, speaking to a section of the Quebec Beef Cattle Association, recently stressed the importance of producing more pounds of marketable beef during 1942. This is a timely suggestion and in view of existing conditions it is important. At the present time due to increased purchasing power and war demands, it is possible that we may not be able to fill our export quota to the United States. Such a situation would without doubt lead to the cancellation of our preferred position on the American market. It took a long time to gain this position and we should by all means do what we can to hold it.

We can do this through marketing our cattle at heavier weights and with a higher degree of finish. It is expected that we will have heavier marketings from Western Canada this year, but it is also expected that we may have somewhat lighter shipments from Eastern Canada.

In the event that these two balance out properly we will avoid any interference with our marketing, but we can help to assure our position by producing more pounds at home.

Prices for beef have been favourable since the outbreak of war. There is every reason to believe that they will continue for the duration. In spite of this and the steps which have been taken to increase our production through assistance in the purchasing of fertilizers and the subsidy on feed, we must continue in our efforts to produce more to meet our growing demands.

THE CORN BORER IS STILL WITH US

The excellent work done last year by the Plant Protection Service greatly reduced the amount of damage from corn borer, but that does not mean that the battle is over. Only unrelenting control measures will make our corn crops free of this dangerous pest.

One feature of the work last year was the hearty co-operation given by the municipal councils in sponsoring the spring "clean-up week" during which all fields where corn has been grown the previous year are supposed to be cleared of all remnants of the crop. Again this year the councils of all municipalities will be asked to pass legislation, if they did not do so last year, making this clean-up compulsory, and providing suitable fines for all those who neglect this important work.

There is a Provincial law which requires all corn growers to clean up their fields before the first of June. Any grower who has not obeyed the municipal ruling (whether he grows many acres, or whether he grows a few hills in his garden), and on whose land corn remnants still remain after June first, will be prosecuted under the Provincial law. A word to the wise should be sufficient.

AID TO HOG RAISERS

We are now able to publish more complete details of the Department's project to help farmers who are growing hog feed at home, an outline of which appeared in these pages last month.

Subsidies to a maximum of $2.00 per acre will be paid to members of agricultural societies for growing mixed grain for the feeding of hogs on their farms. The conditions which must be met by the farmer to become eligible for this assistance are as follows:

1. He must be a member in good standing of an agricultural society.
2. He must sow at least 5 acres for each breeding sow he keeps, using recommended mixtures.
3. He must have at least one breeding sow on his farm which will produce 2 litters a year.
4. He must sell no hogs weighing less than 200 pounds; must sell them alive, whenever possible and according to official grading. Country-killed pigs cannot be exported.
5. He must provide a suitable and hygienic shelter for his pigs.

Although any farmer may sow as much grain as he wants to, subsidies will not be paid on more than 10 acres. The farm of each applicant will be inspected in August, and scored according to

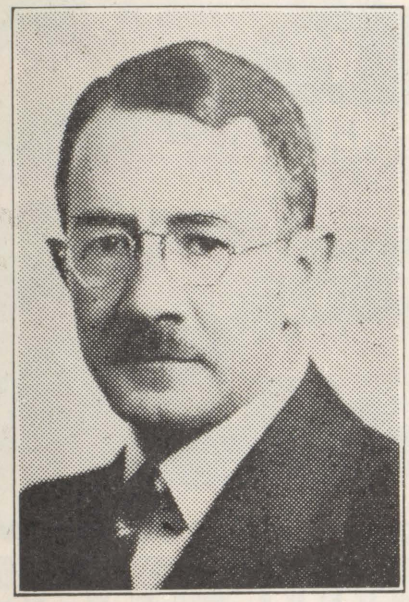
1. Number of breeding sows kept.
2. Number of acres in mixed grain.
3. Soil preparation.
4. Liming or fertilizing.
5. Seeding.
6. Yield per acre.

Subsidies will be paid on the scale shown below:

For 80 points or over	$2.00 per acre.
70-70 points	1.50 " "
60-69 "	1.00 " "

The younger generation approves of this registered Shropshire ewe and her quadruplets. They belong to Slack Bros., Waterloo, and we are indebted to Mr. Garett Chapman for sending us this unusual picture.

DEPARTMENT PERSONALITIES



Mr. J. A. PROULX, B.S.A., *Director of Services*

The position of Director of Services, left vacant since 1940, when the former holder, Dr. Morin, became Associate Deputy Minister, will be ably filled by the new incumbent, Mr. J. A. Proulx.

Mr. Proulx is a native of l'Avenir, in Drummond County, and took his B.S.A. degree at Oka. He spent 10 years as county agronome for Richmond, and was for several years secretary of the local wool growers' co-operative and of the local branch of the Montreal Milk Producers' Association. His abilities in the field of co-operation led to his appointment as fieldman for the Coopérative Fédérée, and many co-operatives in the Eastern Townships owe their existence and prosperity to his organizing ability.

He was appointed Director of Extension Services when Premier Godbout assumed office, a position which he filled most ably until he relinquished it to take over the duties of his new department on the first of January.

The gold medal of the Order of Agricultural Merit was awarded Mr. Proulx in 1941.

The latest figures available show that in 1941 Canada produced approximately 34,000,000 bushels less of oats than in 1940. Despite this fact, the marketings of oats in the Prairie Provinces from August 1, 1941 to January 30, 1942, was about 1.38 times heavier than in 1940-41 for the same period. Rail shipments to Eastern Canada over the same period have been 2.79 times greater than for the corresponding period of a year ago. For the past few months oats have been selling at prices higher than either barley or wheat. Does this mean that Eastern feeders have the habit of feeding oats so strongly fixed that regardless of the fact that they supply the least digestible nutrients and cost more per pound to buy, they ignore these facts and still purchase oats?

Where Does Canada Get Her Sugar?

Canadians like sugar; in fact, every Canadian eats about 100 pounds of it a year, more than any other nation in the world. This means that more than one billion pounds of sugar are consumed in Canada every year, and it might be interesting to see just where all the supply comes from.

Sugar cane furnishes the raw material for about four-fifths of the total white sugar we use in Canada. Sugar cane cannot be grown in this climate and consequently all the cane sugar that we use must be imported. The rest of our white sugar is made from sugar beets, which can be and are grown in this country. In 1940 about 19% of all Canada's sugar requirements — over 213 million pounds — came from sugar beets grown in Ontario, Alberta and Manitoba. This was the largest amount of beet sugar ever produced in Canada.

At the present time we have 5 beet sugar factories; two in Ontario, two in Alberta and one in Manitoba.

A sixth is now being built in Quebec, at St. Hilaire, under the auspices of the Department of Agriculture, which will eventually be owned co-operatively by the farmers of the district. It is not yet certain if the factory will be finished in time to process beets this year, but farmers of the vicinity are being encouraged to grow sugar beets this summer, more as an experiment and to give them some practice with the crop. If the factory is ready for operation by fall, the beets will be bought and processed. If it is not open, the farmers will use the beets for livestock feed on their own farms. Eventually, it is expected that about 10,000 acres of sugar beets will be needed every year to keep the plant operating at capacity.

MORE SHEEP NEEDED

Canada uses 109 million pounds of wool a year, of which 80% comes from Australia and New Zealand. We produce only 19 million pounds, less than one fifth of our requirements. The situation in the Pacific indicates that there will be difficulty in getting wool out of Australia and New Zealand for some time to come, and something must be done to replace this source of our supply.

The Department is keenly interested in seeing an expansion of sheep-raising in this province, and is giving sheep owners all the help possible to increase their flocks and advice as to how to secure the maximum production. Last year, for example, the agronomes took more than 4,000 ewe lambs off the livestock markets and made them available to farmers who wanted to increase the size of their flocks. Bounties paid for bears killed up to the first of last February amounted to $11,785.00, which represents 2357 bears destroyed. Bears, by the way, may be killed by anyone who comes across them in any place where they may be in a position to cause damage to livestock. Also, the dog laws passed during the last session of the Legislature have been of great value to sheep farmers.

Sheep flocks should be increased for there is a good market for both wool and for meat. Sheep raising is in every way a true war effort.

STRIPPINGS

by Gordon W. Geddes

Dealers must have been pretty pleased at the opinions expressed at the Brome County Farm Forum Conference that profit margins were too small to permit the formation of buying co-operatives. We found it apparently that way on fertilizers but we still think the reason is that we don't know what the margin really is; in other words, we don't get offered real wholesale prices. 'Tain't cricket and if they won't play ball with us we should get up a game of our own with our own co-op all the way. Still, we do believe that a co-op should not be organized unless it can better existing services. Actually, the private firm that is prepared to give good service at reasonable rates is the best form of co-operation.

Still, whatever the profit margin is, some dealers run a pretty big staff and seem to make more than the farmer. Of course, they have a big volume of business and that's why a fraction of the government rebate on freight would put a lot of money in their pockets. Their own small profit is also what makes that lost fraction look so big to farmers. In spite of what Mr. Presant had to say about a wholesale ceiling on oilcake we note (with satisfaction) that the Price Board found it advisable to establish such a ceiling. As to the freight rebate on balanced rations, we don't know anything about conditions in Ontario but 'usually reliable sources' here thought at the time that it was passed on to the farmer at a flat rate of $1 per ton. A neighbour tried to get actual figures for me from his account book and did find that reduction on dairy feed but an increase on poultry mash and scratch grain. This is a belated reply to Mr. Presant as I was only informed of his comment through the columns of the Journal.

A farmer who used the Account Book distributed by the Quebec government through the Farm Forum would be a long way from able to furnish cost-of-production figures per unit on milk, pork, eggs, etc. In fact he wouldn't even

(Continued on page 20)

THE QUESTION BOX

Have you any problems that are bothering you? This column is at your disposal. Address your questions to the Editor, Macdonald College, P.Q.

Question: Please explain about R.O.P. Approved Cockerels, R.O.P.-Sired chicks and second generation birds.—A. R. S.

Answer: The term R.O.P. means Record of Performance. When applied to poultry it signifies that the pullets have been entered in a laying test, conducted on the farmer's premises, under the supervision of Dominion Government inspectors. To become a qualified R.O.P. hen a pullet must lay a minimum of 200 eggs in her first year's lay and must also be typical of her breed, with no standard disqualifications and she must lay eggs weighing 24 ounces to the dozen after the first month.

An Approval R.O.P. cockerel is one whose dam passed the above test and also his grand dam, thus giving two generations of official breeding in his pedigree. The term R.O.P.-Sired is used to designate that a flock of hens is mated with R.O.P. Approved male birds. It should also be mentioned that an R.O.P. Approved cockerel is one which not only has two generations of official breeding behind him but has himself passed an inspector for general physical qualities. He must be free of all standard disqualifications, vigorous and typical of the breed he represents.

Question: I have read of a new plant called the "topato." Can you tell me anything about it? M.T.

Answer: The topato is a horticultural curiosity, but has little practical value. By grafting a tomato top on to a potato root it has been possible to produce both tomatoes and potatoes on the same plant. The tomatoes grow on the stem portion, the potatoes grow underground. Since every plant must be grafted separately this could not be used to produce on a commercial scale.

(Continued from page 18)

know whether any branch of his operations was a mill-stone round the neck of the others or not. We don't know cost-of-production ourselves but we do know whether hogs, cows or poultry furnish the income. That's why we haven't any hens this year. The ten-cent book furnished by the Kings' Printer at Ottawa gives one a fair idea of how the money comes — and goes.

* * *

The first heifer calf since we took over the farm arrived last week. When we put away the calf pails last fall, we wondered how long it would be before we fed calves again. Now we know. There's also a new class of stock added to the list. We've fed a lot of hogs but there's never been a brood sow on the farm, all the pigs were bought. Sometimes they aren't available when wanted and sometimes the breeding is wrong to make the kind of bacon needed no matter how you feed them. Now we have a sow with real bacon blood but, of course, that doesn't necessarily mean that we'll have little pigs, too. Still we have a chance for it, at least.

* * *

Wonder what ever became of that committee investigating the dairy industry? Was it a war baby that didn't live or is it still around somewhere all bound up with red tape like a model for a first-aid class? If so, while it waits the butter surplus is dwindling, some creameries are shifting to cheese, others are still hanging on to see whether we intend to keep on buttering our bread or eat it dry. If some action isn't taken soon, we'll eat it dry whether or not that is the desire of our leaders.

Fencing of small fields is expensive and the amount of land wasted by a number of small fields is very high. If a square field of one acre is fenced, about fifty rods of fence are required to enclose it; while only eight rods of fence to the acre are required to enclose a square of 40 acres. If the width of the land occupied by the fences in the two fields is uniform, the amount of waste land to the acre would be more than six times as much for the one acre field as for the forty acre field.

THE WOMEN'S INSTITUTES SECTION

Devoted to the activities of the Quebec Institutes and to matters of interest to them

W. I. Notes

by M. Elizabeth McCurdy

Red Cross and War Work

Outstanding in the work of Quebec Women's Institutes during the past month has been the making of leather vests for Norse sailors. Through the generosity of an American automotive manufacturer ten tons of leather pieces were given for the project to Mrs. Stein, wife of the Norwegian Ambassador, and also several bolts of lining from another industry. Some of the Branches have already made a beginning on this work, among them Cowansville, and Lennoxville whose members have completed ten of the vests. Cowansville purchased several War Savings Certificates and made a number of afghans. East Clifton donated $2 to Air Raid Victims. Several boxes for overseas men were packed and forwarded, and letters of thanks received in return. Belvedere donated 10 Comfort Bags, and 20 knitted articles. Brompton sent three boxes for refugees and furnished 5 layettes and 2 quilts, also sold War Savings Stamps; Cherry River sent 2 sweaters, 2 pyjamas and 2 sweaters, and 4 quilts. Orford reports 9 knitted articles, and Milby 10 Comfort bags, knitting and sewing; Lennoxville, 17 utility bags, with knitting and sewing.

Cleveland Branch held a succession of teas to raise funds, and sent chocolate to the R. A. F. Bury sent boxes to overseas Institutes. Oak Bay sent a cash contribution to the Mobile Kitchen Fund. Port Daniel had a explanation of the Price Ceiling movement by Mrs. C. E. Dow, Provincial President of the Q. W. I. Way's Mills sent a total of 14 quilts to the Red Cross. Stanstead North sent 3 pairs of socks and several quilts to the Red Cross. Hatley sent boxes of food to Ste. Annes Military Hospital, and Tomifobia a blanket to the Red Cross. Dixville sent 23 knitted articles for Red Cross purposes.

Dundee subscribed $100 for Victory Bonds, and Howick $8 for War Savings Certificates. Clarendon and Bristol Busy Bees each donated $5 to Pontiac Ambulance Fund, and purchased War Saving Certificates. $12 proceeds of a tea, was devoted to war work.

Shawville donated $18 to Russian Relief Fund for medical supplies and Stark's Corners supplied a comforter and clothing for refugees. Wyman sent tea to an English Institute, and blankets, quilts and boxes overseas to local boys and a girl serving overseas. Aylmer East contributed 8 knitted articles, 11 sewed, including a quilt.

At South Bolton the W. I. and Red Cross jointly cooperated in war work, many finished articles being handed in at each meeting. Orford reports 20 knitted articles, and Cherry River 20 knitted and 2 sewed articles for the month. East Clifton donated War Stamps as prizes in local schools, packed four Easter baskets for the Red Cross, as well as 12 large quilts, 9 crib quilts, pillows, layettes and slippers, Scotstown voted $10 to the Russian Relief Fund, $5 to the local Red Cross, and forwarded to headquarters during the month 21 knitted and 30 sewed articles, as well as boots and shoes and rubbers, a mattress cover and a set of child's furs.

Bury Branch decided to take up the work of making leather vests for Norse sailors, following an address by Mrs. W. J. H. Kuhring, explaining the project. North Hatley arranged for the completion of an afghan. This Branch had a cash outlay of $71 for boxes sent to local boys overseas. $25 in boxes sent to Newfoundland, and $24 on boxes to boys in Canadian camps.

Breckenridge devoted the entire meeting to Red Cross work. Rupert had an assortment of sewing and knitting for the Red Cross, each member contributing cash to the funds. Wakefield Branch made a donation to the Russian Relief Fund. Work included a scarf, and 8 sewed articles, including a quilt. Arrangements were discussed to secure blood donors. Wright Branch started a special fund to defray the expenses of blood donors.

Brownsburg gave $5.25 to the Red Cross and Lakefield $5 the latter Branch reporting 75 knitted articles, 2 quilts, 2 blankets given to the Red Cross. Pioneer raised money for boxes overseas and donated a quilt. Jerusalem-Bethany and Mille Isles made 5 quilts each for the Red Cross.

Girls who prepared hot lunches in Ascot School were awarded War Savings Stamps by Ascot Branch. This Branch reported 62 knitted articles, 3 quilts, and a number of articles of clothing for V Bundles for Britain. Milby sent War Savings Stamps to a new baby and planned a social event to raise funds for more Red Cross work.

The total amount of work done during the last three months of the year as reported to Miss Daly was as follows: Money raised: $584.94; quilts and blankets: 102;, knitted articles: 1,503; sewn articles: 1343.

Community Co-Operation

An illustration of what Co-operation can accomplish was shown at Scotstown recently, when the Women's Institute Refugee Committee invited the citizens to salvage all wool garments no longer in use. The response was gratifying and the movement resulted in many valuable quilts and garments which were made from the reclaimed wool.

The Cercle des Fermières undertook the work of weaving of blankets from the renovated wool, these to be sent overseas. A total of 2 knitted quilts, 14 pieced woollen quilts, 25 other quilts, 5 blankets, 345 pounds of good used clothing resulted from this thrifty stock-taking. A sale of left-overs amounted to $12.50, which with the proceeds of a series of vanishing teas have helped to build up a sound financial basis in this Branch for war work for future months. This result could not possibly have been achieved without the whole-hearted co-operation of all in the community.

Fashion Show Sponsored by Vaudreuil W.I.

A very entertaining and instructive Fashion Show was given in Hudson, by the Wabasso Cotton Co. and sponsored by the Como, Hudson and Hudson Heights Women's Institute. Over four hundred articles, including quilts, woollens, winter coats, blankets, and socks were sent to V Bundles for Britain during the last weeks of the winter, and for these letters of thanks have been received from the Duchess of Northumberland and the daughter of Hon. Winston Churchill.

Publicity

PRESS NEWS, LTD., the organization which makes Canadian Press News available for use on the radio, has requested that it be placed on the weekly publicity mailing list of the Q. W. I. This request was promptly acceded to.

Ways of advertising the work of the W. I. were discussed in Dundee and Wright Branches. Bury and Rupert Branches had papers on publicity. At Howick, the annual report of the Q. W. I. was studied, and at Huntingdon an address was given by Mr. Adam Sellar.

Home Economics

That the work of the Price Ceiling Board is being studied and observed is evident in many Branch reports. Scotstown Branch heard readings on the subject, and Howick discussed the matter at the meetings. Lennoxville had a report of the Regional meeting at Quebec from Mrs. A. E. Abercrombie who represented the Province there. North Hatley also considered the Price Ceiling movement, and Wright Branch members agreed to assist as far as possible, as well as to try to conserve sugar. Recipes calling for small amounts of sugar were requested. Mille Isles exchanged recipes and heard a paper on the making of glass as it related to war industry. Morin Heights had recipes for quick supper dishes.

Child Welfare

Brownsburg Branch had a lecture and demonstration on First Aid and Artificial Respiration. Orford Branch voted $2 to the funds of a campaign for the Association of the Blind. South Bolton supplied kitchen ware to fire sufferers, and clothing for an infant. Dundee sent $5 to the Girl's Friendly Home, and Howick $5 to the V. O. N., and discussed foods and nutrition. Bury planned to hold a clinic for three months. Ascot used the Vollmer Patch Test in the clinic connected with Ascot Consolidated School.

Agriculture

East Clifton Branch gave a donation towards the upkeep of the local cemetery. Bury Branch catered for the annual dinner of the Farmer's Club, and decided to carry on the School Fair again this coming autumn. Dundee Branch had information on the care of house plants. Ascot Branch reports several Farm Forum Listening groups during the winter.

Education

Cowansville Branch completed the raising of a fund for a scholarship in the local school. A synopsis of addresses given by Inspector R. O. Bartlett on a system of centralized administration of education was read by Mrs. W. D. Smith. A review of articles from Macdonald College Journal, covering the past ten months, was read.

Orford donated money for school prizes, and Brompton supplied hot school lunches, and $10 worth of clothing so that an under privileged child might attend school. Dundee donated $5 to the High School, $2 to a Travelling Library, and $15 to other school needs. Stanstead North furnished hot school lunches during the cold weather. North Hatley supervised medical inspection of the local school by the local doctor. "The Need of Cheerfulness" was the subject of a paper at Spooner Pond.

Dr. Percival was the guest speaker at Ormstown Branch and discussed the Larger School Unit. Aubrey Branch had a discussion on Departmental Scholarships, and Huntingdon had a paper on St. Valentine's Day.

Scotstown High School teaching staff were hostesses for the W. I. Meeting, in February. Aylmer East had a variety of educational articles read on current topics, followed by discussion. Wakefield donated equipment to the school kitchen and planted shrubs on the school grounds. Ascot entertained the teaching staff of the Consolidated School, and heard an address by the Principal, Mr. A. B. Farquhar, on Education.

A paper on "Radios versus Newspress" was read in Dundee Branch by Mrs. Earl Gardner. Howick discussed the World's Day of Prayer Radio Programme, heard a paper on the Grenfell Mission, and a travel talk by Rev. C. Leslie Taylor on "Across Canada". North Hatley discussed means of raising funds for the scholarships given from the Branch. A book on the Parent-Teacher Association was read and studied, and the matter of organizing a Branch was considered.

Canadianization

"Is your Church a Community Centre?" was the subject of an address in Ayer's Cliff Branch, given by Rev. M. H. Sanderson. Post-War adjustments were described, and the need of thought along this line was emphasized. A paper on "The Flag" was given in Dixville Branch. Howick and Aubrey celebrated Robert Burns Day, with a selection of his poems.

Richmond Branch had a paper on Canadianization.

GETTING RID OF THE SUPERFLUOUS

The time for the annual upheaval known as spring-cleaning has arrived, and during this period house-keepers will be taking stock of the contents of each room, closet, drawer, box and attic. Never was there a better time to dispose of "white elephants" in used clothing, remnants, wool and cotton rags, and the hundred and one things which accumulate during the years of family life. With unceasing and very pressing demand for all discarded textiles, old shoes and rubbers, metals and waste paper no home need be longer cluttered with useless contents than it takes to collect, classify and hand them over to the collectors of salvage.

Very familiar is the type of housekeeper who religiously saves everything, with the idea that, if kept long enough, they will come in handy. Generations of out-grown garments hang in her attic, a standing invitation to moths. Boxes and bags are overflowing with "pieces" of every size and shape. Pantry shelves are lined with utensils which are no longer useful. Now is the time to turn these out and over to those who will utilize even the oldest and poorest of them.

The better class of material can be made into garments for evacuated children through the organization known as Bundles for Britain, Montreal, which accepts any clean, used clothing, remodels it and forwards it to England. There can be a Branch of this organization in every community for the reception of this material and much of the making may be done before forwarding to Montreal. In the clever hands of a few women dainty and serviceable garments may be transformed out of this otherwise waste material, thus accomplishing two results: getting rid of superfluous possessions and supplying some of the hundreds of children in Europe with things they sorely need.

Another distinct type of woman is the confirmed bargain hunter. Shopping means to her not the conscientious buying of necessities to keep her home well supplied, but a continual search for "something cheap." This becomes in time a sort of mania, and an expensive one, a waste of time, money and storage. Goods laid away and not used become soiled and creased in drawers and boxes. Styles change and every sort of material becomes out-dated.

Again, now is the time to clear out this store of unused goods, and send it somewhere to be used for those who have no means of securing clothing suitable for the summer. To withhold it at this time of the world's great need might well be called a crime. House cleaning will be made easier for years to come, in addition to the good it will do to give what is not needed, and hearts will be lighter, both of the giver and the receiver.

PARENTS AND CHILDREN

by Mary Avison

"Mummy the snow-drops are out!"

"Daddy—we saw a robin coming home from school! They'll soon be building their nests."

"And there are hundreds of baby chicks in the poultry building."

"Yes. We heard one just cracking its shell. How do they get *in?*"

"There are baby lambs at the College too!"

"And a new baby in the house next to Sally's. Can't we have a new baby too?"

"Isn't Spring a lovely time with all the *new* things everywhere!"

Similar conversations are occurring round hundreds of family tables. Little children are asking thousands of questions about life and growth, about birds and animals and babies. This season provides such a splendid opportunity for sound and wholesome learning if only we are prepared to use it.

Country children are especially privileged for they can learn in the best way, from actual observation and experience. They can discover answers to their own questions by just keeping their eyes open. Besides they are more likely to find, in adults who have close contact with seed time and harvest and the care of animals, a wholesome, matter-of-fact acceptance of nature's ways for providing new life. But such wholesome experience and attitudes can be provided for town and city children also, if parents are ready to take or make opportunities. The neighbor's new kitten or new baby, the birds that nest in parks and gardens, the squirrels that scamper and chase each other through the trees before they mate, the dogs and sparrows and butterflies, all these can teach, if we are willing that our children should learn, about life and its processes.

I know that there are many mothers and fathers still puzzled about how to replace the stork myth satisfactorily. We lack language; we lack ease and poise; we lack accurate knowledge. In so small a space, this column cannot attempt to meet adequately the needs of these parents. It can only suggest that we use our opportunities this season, and seek to supplement our lack of words and facts by the use of some of the books listed below. Even a stumbling attempt to answer frankly and sincerely our children's questions is better than the old evasions and deceits; the effort to prepare ourselves to be informed and unperturbed when we answer their questions is part of our job; the open-mindedness and growth necessary to keep the road clear between us and our children for *all* questions, is one of the deeply satisfactory experiences of parenthood.

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Facts: Benj. Gruenberg, Parents and Sex Education: Viking Press. Answering Questions: Frances Bruce Strain — New Patterns in Sex Training: Appleton Century.

For Children Themselves: Karl de Schweinitz — Growing Up (age 6-10) Macmillan.

THE COLLEGE PAGE

News of the College — Staff, Students, Graduates

A BIG CHEESE

Anyone who has ever attended Macdonald College, or even one who has casually visited it, must have realized that a great deal of drive and vision must have been behind the founding and establishment of that institution. A man who possessed these qualities in a high degree was the late Dr. James W. Robertson, the first Principal of the College. One of Dr. Robertson's most characteristic exploits was that of causing to be manufactured a great cheese, which was shown at the World's Fair at Chicago in 1893.

In 1890 Dr. Robertson was called to Ottawa to occupy the dual position of Dominion Dairy Commissioner and Agriculturist at the Central Experimental Farm, which had been established four years earlier — a position modified to that of Commissioner of Agriculture and Dairying in 1895. It was during his occupancy of the former position that Dr. Robertson conceived the scheme to which I have referred. He directed Mr. J. A. Ruddick, afterwards Dairy Commissioner, to undertake the task, and with Mr. Ruddick was associated Mr. G. G. Publow, another dairy expert. The curd was prepared in several factories and brought to a factory at Perth, Ontario, owned by the late Hon. A. J. Matheison. The actual manufacture was under the direction of a Mr. Burdick, superintendent of the factory.

207,300 lbs. of milk, the total product of 10,000 cows for one day, went into the manufacture of this gigantic cheese, which, when completed weighed eleven tons. It measured six feet in height, was 28 feet across and was encased in steel boiler plate. A special truck had to be constructed to take it to the C.P.R. Station, and two flat cars, specially strengthened by timbers, were needed to transport it to the Fair.

It is notable that never, previous to the Royal Visit, did any tour draw such crowds as the progress of this colossal cheese. Great circus posters advertised its coming, and when it finally reached Chicago it was regarded as the sensation of the Fair. If Dr. Robertson had set out to astonish the world, he certainly succeeded.

The cheese was later sent to Liverpool, England, where it made an equal sensation, and the advertisement of this Canadian product which it supplied was to have lasting results in popularizing Canadian cheese on the English market.

THE MACDONALD CLAN

Notes and news of graduates and former students.

DR. ALFRED SAVAGE,

B.S.A. (McGill) 1911: D.V.M., (Cornell) 1914: M.R.C.V.S. (Royal Veterinary College) Edinburgh, 1928.

Dr. Savage is a native of the Province of Quebec. He was born in Montreal in 1889, received his elementary training in the rural schools of Quebec and matriculated from a Montreal High School in 1906. During the greater part of the years 1906 and 1907 he was on a live stock ranch in southern Alberta near Medicine Hat. In the fall of 1907 he entered Macdonald College as a member of the first class in Agriculture. He graduated in 1911, having specialized in Animal Husbandry. In his senior year he took additional studies in comparative anatomy and bacteriology. As a student his was noted for good sportsmanship and exhuberent spirits. The echoes of his characteristic laugh still ring through the corridors of Macdonald College. His superb technique and scientific gifts were already apparent during student days.

During the two years following his graduation he attended the New York State Veterinary College at Ithaca, where he studied under Dr. Williams and graduated from that University in 1914 with honours in anatomy, physiology, pathology, pharmacology and surgery. After graduating from Cornell he returned to his alma mater as College Veterinarian. In the following year he joined the Canadian Army Veterinary Corps and served overseas from 1915 to 1919. In 1917 he was made second-in-command of the veterinary hospital at Le Havre. Returning to Macdonald College in 1919 he again became College Veterinarian, but

in addition he assumed the duties of lecturer in the department of Bacteriology. In 1921, he joined the staff of the Manitoba Agricultural College at Winnipeg to head the Department of Animal Pathology. This was a new department created at the time of his appointment.

In 1927 and 1928 he was granted leave of absence and went to Edinburgh to attend the Royal Veterinary College. He was admitted in 1928 as a member of the Royal College of Veterinary Surgeons. In recognition of his high standing and general proficiency a special medal was awarded him at the completion of his studies. In 1930 the departments of Animal Pathology and Bacteriology at the University of Manitoba were amalgamated and Dr. Savage became head of both departments. In the reorganization of the Faculty of Agriculture in 1933 he was appointed Dean of the Faculty of Agriculture and Home Economics. These duties he continued until the end of 1938 when he was appointed Provincial Animal Pathologist. During the past four years in addition to being Professor of Animal Pathology and Bacteriology, Dr. Savage has had the added responsibility connected with the Provincial Laboratory of Animal Pathology.

Dr. Savage is a man of many parts. In addition to his qualifications as a scientist he also ranks high as a public speaker and lecturer. He has prepared and had published in scientific journals over forty papers dealing with research in the field of animal diseases. Dr. Savage was married in 1929 to Mary Norquay and has one son and one daughter.

College Handicrafts

by Ivan H. Crowell

DURING the past year a co-operative experiment in handicrafts carried out at Macdonald College met with striking response. The equipment was supplied through the Director of Handicrafts, Quebec Department of Agriculture, space was provided by the College and instruction was given by a few staff members and students. At the present time the guild has 53 members. An analysis of the membership shows that 31 are students and 22 are staff. Thus about 1 out of every 8 students in the degree and diploma courses and about 1 out of every 6 staff members and their wives have voluntarily joined the guild. Now for 2 nights and on Saturday afternoon of each week the buzz of the electric saw and the hum of the motor-driven lathes sing the song of handicrafts — practical creative handicrafts. These include principally wood turning, furniture making, leatherwork and glove making.

The results of the experiment to date may be summarized as follows:

1. The cultural value of handicrafts

Experience gathered since the beginning of the academic year shows clearly that Macdonald College students are primarily interested in learning handicrafts for the cultural value of making practical things of their own creative design. Approximately 12% of Macdonald College students and staff body have chosen to join the handicrafts guild. They have voluntarily worked and paid 10 cents per hour for approximately 380 working hours each month — convincing indication of a basic desire on the part of college students and staff members to learn and practise creative crafts.

If a handicrafts club were established at McGill and the same ratio joined, a group of between 250 and 300 would result!

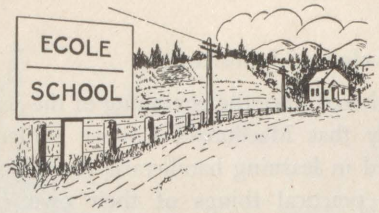
2. A student employment organization

During the summer months a few students and interested staff members were active in producing quality items for sale. Turned wooden ware, as plates, salad bowls, candle holders, napkin rings, candy dishes were the principal articles sold. Repeat orders came so frequently that we were kept busy filling orders for 2 commercial organizations only. Sales amounted to about $600. This is more than was spent for all the equipment that we now have in our handicrafts room. At the present time some students are earning from the sale of articles. Many made their own Christmas presents, thus earning indirectly. Staff members feel that they are getting abundant financial returns for the household objects they make. The guild finances are thriving too, for from the hourly charge we are able to meet all obligations and to purchase some additional equipment. The possibilities of summer employment for students as a means of earning for their education is definitely receiving consideration.

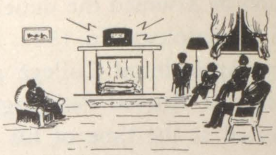
3. A training center for teachers of handicrafts

It seems most unfortunate that handicraft teaching in Quebec is confined essentially to manual training in a limited number of schools. This is probably due largely to the fact that equipment for this purpose is expensive, and requires special benches and space. Such work is limited largely to boys and relatively few boys are naturally interested in manual training. It would seem much more practical to teach a selected group of handicrafts, such as leatherwork, weaving, metal work and pottery. Equipment is inexpensive, requires little additional space and can be taught to boys and girls — and parents too. Many schools could afford the small additional outlay. Such an addition would seem most practical and a distinct contribution to our Protestant educational system, especially in view of the fact that about 90% of our children upon becoming adults will depend for their livelihood upon the skillful use of their hands.

(Concluded on page 28)



LIVING AND LEARNING



Snipers — and Others

The other day an old friend of ours reproached us for getting "tied up" with the C.C.F. — (he actually meant the C.F.A.) in the Farm Radio Forum. Now, we knew that our friend was ordinarily well-informed. We believed him to be a man of open mind, and not one of those "snipers", who pursue with venom any new idea or method, or who "view with alarm" as a "subversive activity" any attempt to inform the public on matters of vital interest to themselves and the nation at large. Therefore, we tried to make our friend see his mistake, and this is what we told him:

The Farm Radio Forum is an educational programme. It deals in facts, not opinions. It aims to lead people to sound conclusions — always on the basis of facts. Its aim is to divert vague feelings of discontent and dissatisfaction into useful and constructive channels by putting people in the way of securing correct information and permitting them to "get things off their chests". Its effect is to keep the farm movement "on the rails", rather than to permit it to run wild as a result of an imperfect knowledge of the facts. It does this by a combined programme of study, listening and discussion. It is firmly based on a principle of self-study and self-help, rather than one of whining and complaint, or demands for somebody, usually the government, to "do something".

Secondly, the Forum is an instrument for stimulating the exchange of ideas. It is designed to ensure that any action should be based on full information and proper motives — not on passion, prejudice or mere opinion.

Thirdly, the Farm Radio Forum is an instrument of national unity, in that it has served to reveal Canada to itself by acquainting the different sections of Canada with the problems of other sections. Much talk is wasted on the need for unity. Here is a programme that does something about it!

Fourthly, it seeks to build a healthy morale among our farm people, by stimulating the forces of self-help, by indicating what can be done by individuals and by groups of individuals to better their situation and better serve their country in peace and war. To this end it has laid special emphasis on the belief that there is a way out of many of our difficulties if we apply the proper remedy.

Fifthly, the Farm Radio Forum is a democratic instrument, enabling the individual to participate in the working processes of democracy by co-operating with one another and with their government in doing what is necessary in the present crisis. The rapid changes taking place in the seething world of today require more than horse and buggy methods. They require prompt adjustment to necessary changes. In hundreds of groups all over this broad land, meeting together to think, study and work together, we are forging a great democratic and patriotic instrument for such prompt and accurate adjustment.

In reply, our friend admitted all this. He even said that, personally, he liked the programme and always listened to it, but still he did not see why we should get mixed up with the "C.C.F." At this point, we abandoned the effort to make our friend believe that the C.C.F. and the C.F.A. were not the same thing, but contented ourselves with pointing out that many organizations were involved. In only three of the provinces did the C.F.A. enter into the picture. Universities, Extension Departments, Adult Education organizations and Departments of Agriculture were all involved. In the national sphere the C.B.C. is responsible for the programme itself, which is financially supported by the Canadian Association for Adult Education and the Canadian Federation of Agriculture. Furthermore, we would gladly accept similar support from the Y.M.C.A. or the W.C.T.U. or the A.F. of L. on the same basis, namely, an agreement that the programme should remain

THE VALUE OF INFORMED ACTION

A message to the Farm Forums from Dr. Barton.

"Collective consideration and exchange of opinion is always good procedure. In addition to providing an opportunity for this approach to farm problems the Farm Radio Forum affords a means through which reliable information with respect to any farm question that may call for consideration can be made available. Farm people are just as capable as any other class of people in reaching sound conclusions with regard to either national or local questions but too often they are not sufficiently informed. There is good reason to believe that the Farm Forum has already been effective in clarifying and establishing the truth.

"Perhaps it can perform no more helpful function. It naturally follows that when the truth is established and facts are understood if any plan of action seems desirable or necessary such action can be taken intelligently and with much greater prospect of satisfactory result than would otherwise be the case. Moreover, the possibility of some co-operative or collective local action in dealing with some local condition or problem has been frequently indicated through the Farm Forum and in some cases successful action has been undertaken. The value of this type of self help can hardly be over-estimated and should be emphasized in Farm Forum work."

G. S. H. BARTON, *Deputy Minister of Agriculture.*

an educational one, with all propaganda or any "boosting" of any particular body, organization or institution rigidly excluded.

Next our friend changed his ground and objected to the "leanings" of some of our local commentators. We pointed out that the function of these people was merely to summarize the findings sent in by the individual forums. Representative farmers — of whom our friend was one — were invited to offer their services — and our friend admitted that they did a good job. Their "leanings" — and they represented all shades of political and economic thought — have no bearing on the case, and we do not suppose that even our friend would desert his church if he disliked the opinions of some of his fellow members. To take that attitude would be to emulate the man who would not even do right if he thought the devil wanted him to!

Finally, we reminded our friend that the Forum Committee is not by any means complacent or satisfied with its efforts. It hopes to improve and it has urged Forum members to send in their criticisms. It has even *pleaded* for criticism to enable it to improve the programme. Many valuable criticisms have actually been sent in by listeners, and have been incorporated in the programme. Surely, this is better than indulging in destructive criticism of a programme that is admitted to be good and that represents an advance in our methods of agricultural education. For this

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FARM FORUM SEASON CONCLUDES

March the 30th concluded the first year of National Farm Radio Forums. A program which in 16 weeks won the loyalty and support of 17,000 farm people from the nine provinces. The English-speaking people of Quebec did their share to swell the total by 2000 people, representing 125 discussion groups.

If you remember weather conditions of many of the Monday evenings in January and February, you will appreciate the fact that 25 groups did not miss one broadcast during the winter series. The last Forum meeting in many communities was a great social event.

In Stanstead County, five listening groups met at Barnston with a special speaker describing a Health Unit. Two communities in Richmond County celebrated with a hot bean supper. The 8 Howick Forums divided themselves between two meetings — one in the English River County Club with Mr. P. D. McArthur, President of the Quebec Council of Farm Forums as special speaker, and the other in the spacious home of Mr. D. A. Wilson of Howick. Here the program was — listening to the broadcast, consuming of a grand lunch, having a real taffy pull and ending with a good old Paul Jones. The Ormstown groups made good use of their High School which is well adapted to large community gatherings. About 200 people in all attended and had as their chairman, Mr. George Collum. Following the radio program he called on representatives from each Forum to report. Their concise replies would indicate the weekly discussions are sustaining the morale of the people, regenerating community appreciation, and through mutual understanding laying a firm foundation for constructive action. Alex Sim, National Secretary of the Farm Forums and Arthur Haas, Quebec Secretary, spoke briefly. They emphasized the importance of the two-way communication of the program. That only when the groups were replying regularly could we measure the success or failure of the subject material. They expressed their appreciation of the constructive suggestions and wholehearted support received from the groups in this province.

Piano, saxaphone and violin music was included in the program and in all cases were heartily enjoyed. Lunch and dancing completed the evening.

The Summer Program

Now about the immediate future of the program. As a result of replies received from Farm Radio Forum groups throughout the country, the National Committee has decided to continue National Farm Radio Forum during the summer on a limited scale.

1. There will be a broadcast every fourth Monday beginning April 27th. This means there will be broadcasts on May 25, June 22, July 20, August 17 and September 14.

2. The broadcast to eastern Canada will be from 8.45-9.30 p.m., E.D.T.

3. These fifteen minute broadcasts will take the form of talks, interviews, or diologues by farm leaders.

4. It is planned that questions for group discussion will be drawn up in the national office and copies mailed to the provincial office for mimeographing and distribution to Farm Forum groups. Farm Forum Facts will not be published during the summer.

PONTIAC FORUMS MEET

A meeting of Farm Forum Groups was held at Neil Drummond's home, Shawville, on March 23rd with representatives of the provincial office present. Rueben Smith presided and reported for a town group. They had enjoyed the meetings more than curling and that was saying a good deal. Arthur Dagg said that the 7th line Group had revived the community spirit and that justified the whole thing; a good deal of benefit had also resulted from pooling thoughts and ideas.

L. A. Smart of Stark's Corners said that the Forum programme had made it worth while to get out on stormy nights. "It opened up subjects that we would not ordinarily have discussed and we learned things."

Conference Dates

County Conferences are planned in:

BROME: May 30.
RICHMOND: June 1.
STANSTEAD: May 29 or June 6.

PROVINCIAL CONFERENCE AT MACDONALD COLLEGE ON JUNE 8.

SNIPERS — AND . . .

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is not a programme to stir up or to capitalize on discontent, but to clear up misconceptions by stating the truth, and to direct vague discontent and misinformed criticism into constructive channels. It is not designed to embarrass but to assist all efforts making for efficiency and good government.

"By their fruits ye shall know them", and here are the fruits! One of our groups has organized a local health service, involving hospitalization. Hundreds of requests for farm account books have been received. Scores of requests for study outlines and pamphlets have come in. Farm co-operative organizations are under way. Many groups are studying what form of community activity they should undertake. These are but a few of the fruits of the Farm Forum programme. We know that since the programme started there has been a steady improvement in the character of the reports sent in by the individual forums — more suggestions as to what the groups themselves might do, and less carping criticism of the actions of other bodies. To fight such a programme — indeed, to fail to support it — is not the work of a good citizen.

It is not, in our opinion, becoming for people like our friend to adopt a policy of "sniping" at those who, at some sacrifice, are doing a public service of this kind. Surely the time has arrived for us all to get together on a common platform of work and service! Surely it is time to stop calling in question the motives of those who seek for improvement through democratic channels. The most dangerous fifth columnists are those who have lost faith in democratic methods. Some of these people are mentally fascists, whose contribution to the war would be to shoot all "foreigners" or at least to lock them up, and who can think of nothing more constructive than to suppress all those whose views or methods differ from their own. They cannot conceive of achieving results through educational methods. They have no conception of the vital factor of civilian morale in fighting a war. Consciously or unconsciously, they injure public morale by sowing disunity and non-co-operation.

The enemy fifth column, engaged in sabotage of industry or in spreading subversive ideas, is indeed dangerous. But they can be shut up in internment camps or otherwise dealt with by the law of the land. The really dangerous fifth columnists, however, are walking our streets, safe from molestation, because they are our own citizens! Many consider themselves to be good citizens. Some of them would be shocked to learn that through ignorance or blindness, inertia or prejudice, complacency or laziness, their activities, or lack of activity, place them as unconscious allies of the fifth column. We urge our friend not to qualify for membership in that melancholy association!

COLLEGE HANDICRAFTS . . .

(Continued from page 25)

A teaching program could be fitted into our handicrafts, probably to mutual advantage of student teachers and regular members. It might be possible to have special instruction given in the summer school for teachers.

4. Adult Education

Experience gathered from the activities of the staff members who have joined our handicrafts guild shows clearly that these mature people are anxious to have an opportunity to do practical creative handicrafts. It would seem probable that if staff members of our college find satisfying pleasures in creative handicrafts other adults of the province will also. It seems, however, that the English population of Quebec has been rather slow to take up handicraft activities. Some French communities, on the other hand, have made outstanding successes of their handicraft endeavors. Perhaps a nucleus for expansion can be formed around those of our staff members who are now engaged in handicrafts.

When the potato was introduced in Scotland, sermons were preached against it. It was declared that, as the potato was not mentioned in the Bible, it must be unfit for Christians to eat. It was even described by one divine as being the forbidden fruit which had caused the fall of Adam. Other enemies of the potato accused it of causing leprosy and fever.

A HANDY SUGAR-SAVING CHART

WHEN RECIPE CALLS FOR ONE CUP OF GRANULATED SUGAR YOU MAY SUBSTITUTE

	MOLASSES	MAPLE SYRUP	HONEY	CORN SYRUP
Amount	1 cup	1¼ cups. Reduce liquid by ½	1 cup Reduce liquid by ¼	1 cup. Reduce liquid by ⅛.
When used in baking (acidity)	Add ½ tsp. soda for each cup.	Add ½ tsp. soda for each cup.	Add ⅛ tsp. soda for each cup or none.	Add ⅛ tsp. soda for each cup or none.
For comparable sweetness	1½ c. = 1 c. Granulated sugar.	1½ c. = 1 c. gran. sugar.	¾ cup = 1 cup granulated sugar	2 cups = 1 cup granulated sugar
Notes	Cakes heavier but stay moist longer.	Good on cereals, in puddings, sauces.	Thickness of honey must be taken into consideration in any substitution.	Good in custards, muffins, drop cookies, cake, frostings and preserving fruit.

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a previously arranged contract basis, but a good deal of the table stock shipped to the United States goes on consignment.

Too much emphasis cannot be placed on an attractive pack. The day of the dirty untrimmed root is about over. Present day markets whether at home or abroad call for a root that is scrubbed, trimmed of all excess neck and feeding roots, graded and finally waxed. Such a product not only makes a greater appeal to the purchaser, but the waxing which does a lot to improve appearances also provides greater preservation and brings the product to the housewife in a more wholesome condition.

The province of Quebec has in the past missed an opportunity in the table stock swede. Not well adapted in the heavy flat lands to the west, there are many areas in the Townships and in the lower St. Lawrence where it may be grown successfully. Quebec should at least look forward to supplying its own needs in table stock of this crop. The chief reason for the vast disparity in prices offered, noted at the beginning, is not an inability to produce a good product, but very largely poor marketing. A combination of good production methods and good marketing technique can make the table swede a worth while cash crop for many farmers in Quebec.

BACON FOR BRITAIN plus PORK FOR CANADA

7½ MILLION HOGS A YEAR ARE NEEDED TO SATISFY THE PRESENT DEMAND FOR EXPORT AND DOMESTIC PORK PRODUCTS.

To meet this requirement each producer should market **SIX** hogs for every **FIVE** marketed in 1941.

HERE IS CANADA'S RECORD:—

Year	Inspected Slaughterings	Per Cent over Prev. Yr.	Bacon Exports Million Lb.	Per Cent over Prev. Yr.
1938	**3,137,000**	....	**169.5**	....
1939	**3,628,000**	15.7	**186.5**	10.0
1940	**5,455,000**	50.4	**344.1**	84.5
1941	**6,274,000**	15.0	**460.8**	33.9
REQUIRED NOW:—				
	7,500,000	19.5	**600.0**	30.2

To Attain This Objective It Will Be Necessary:—

To save as many as possible of the pigs farrowed.
To increase by 20 per cent the number of sows bred this spring.
To breed sows to farrow twice yearly.
To market each hog at 200 — 210 pounds.

For further information consult your Provincial Department of Agriculture, Agricultural College, or nearest Dominion Experimental Farm, or Live Stock Office of the Dominion Department of Agriculture.

AGRICULTURAL SUPPLIES BOARD
Dominion Department of Agriculture, Ottawa
Honourable James G. Gardiner, Minister